

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/822,643	03/30/2001	Blaise B. Fanning	42390P10572	7641	
8791	7590 11/05/2003		EXAMINER		
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR			PORTKA, GARY J		
	LES, CA 90025	ENTHFLOOK	ART UNIT	PAPER NUMBER	
	•		2188		
			DATE MAILED: 11/05/2003	. 11	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary Carry Forks Examiner Art Unit 2188		<u> </u>			
## Examiner Sary J Portiks 2188 ## The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. • Exemptions of time may be available under the provisions of 30° CFR 1.038(a), in no event, however, may a reply be timely filled in the provision of 30° CFR 1.038(a), in no event, however, may a reply be timely filled in the provision of 30° CFR 1.038(a), in no event, however, may a reply be timely filled in the provision of 30° CFR 1.038(a), in no event, however, may a reply be timely filled in the provision of 30° CFR 1.038(a), in no event, however, may a reply be timely filled on the realing data of this communication of thiny (30) days, will be considered from the realing data of the provision of 10° CFR 1.038(a), in no event, however, may a reply be timely filled. • If the period for really is apposed above, the maximum standards period will apply and will apply and will suppris \$1.00 (b) (40° MeV). The form the realing data of this communication, even if timely filled, may reduce any search part term adjustment. Set 30° CFR 1.04(b). • Status 1) □ Responsive to communication(s) filled on 07 August 2003. 2e) □ This action is FINAL. 2b) □ This action is non-frinal. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) □ Claim(s) 1-32 is/are pending in the application. 4a) ○ Claim(s) 1-32 is/are rejected. 7) □ The proposed drawing correction filled on 10° Leventh and the drawing of the provision of the provision of the drawing of the provision of the provision of the drawing of the provision of the drawing of the provision of the drawing of th	`	Application No.	Applicant(s)	8	
Gary J Portka 2188		09/822,643	FANNING, BLAISE B.	FANNING, BLAISE B.	
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Estancisor of them my be available used the provisions of 37 CPR 1.13(a), in no event, however, may a reply be timely filled after SIX (8) MONTHS from the making date of this communication. Estancisor of time my be available used the provisions of 37 CPR 1.13(a), in no event, however, may a reply be timely filled after SIX (9) MONTHS from the making date of this communication. Failure to reply within the sect or estancied period for reply will, by statute, pause the application to become ABANDONED (35 U.S.C. § 133). After they sected by the Office after than three morns are the making date of this communication. even if timely filled, may reduce any statute period them equations. The section is provided by the Citica after than three morns are the making date of this communication is provided by the Citica after than three morns are the making date of this communication. even if timely filled, may reduce any status. 1) ■ Responsive to communication(s) filled on 07 August 2003. 2a) ■ This action is FINAL. 2b) ■ This action is FINAL. 2b) ■ This action is round the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Cialms 4) ■ Claim(s) 1-32 islare pending in the application. 4a) Of the above claim(s) islare withdrawn from consideration. 5b) ■ Claim(s) 1-32 islare expected. 7c) □ Claim(s) 1-32 islare objected to. 3c) ■ Claim(s) 1-32 islare objected to. 3c) ■ Claim(s) 1-32 islare objected to by the Examiner. Application Papers 9) ■ The specification is objected to by the Examiner. 10) ■ The drawing(s) filed on 30 March 2001 islare: al⊠ accepted or b) □ objected to by the Examiner. 11 approved, corrected drawings are required in reply to this Office action. 12 □ The oath or declaration is objected to by the Examiner. 13 □ Acknowledgment is made	Office Action Summary	Examiner	Art Unit		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extractors of time many be available under the provisions of 37 CFR 1.136(a). In no event, however, may a regly be finely field - If the period for emply sectical advoice, the maximum statutory priority within the statutory minimum of thinty (30) days will be considered timely. - If NO period for regly is appoiled above, the maximum statutory priority all apply set of will apply and apply and will apply and apply and will apply and apply apply and apply apply and apply apply apply apply and apply appl					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions for memy be available under the provision of 3° CPR 1.736(a), in no event, however, may a reply be timely filled Extensions for memy be available under the provision of 3° CPR 1.736(a). In no event, however, may a reply be timely filled If the period for reply specified above is less that thirty (30) days, a reply white the salutury minimum of thirty (30) days, as will be considered timely. If the period for reply specified above is less that thirty (30) days, a reply white the salutury minimum of thirty (30) days, as the considered period for reply while, it is above to extended period for reply while, it is above to extended period for reply while, it is above to extended period for reply while, the set of extended period for reply while, it is above to extended period for reply while, it is above to extended period for reply while, it is a reply while, it is a reply while, the set of the communication, even it timely flood, may reduce any search and a reply while, the set of the communication while the precision of the communication is provided to the communication of the communication. 1) Separation is FINAL. 2) This action is provided the precision of the communication is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-32 is/are pending in the application. 4) Claim(s) 1-32 is/are pending in the application. 5) Claim(s) 1-32 is/are pending in the application. 4) Claim(s) 1-32 is/are pending in the application. 6) Claim(s) 1-32 is/are pending in the application. 6) Claim(s) 1-32 is/are pending in the application. 7) Claim(s) 1-32 is/are pending the pendin		appears on the cover sheet wi	th the correspondence addres	'S	
1) Responsive to communication(s) filed on 97 August 2003. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are ellowed. 5) Claim(s) is/are ellowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. Sea 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some *c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17. 2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. **ttackment(s)	A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by sta - Any reply received by the Office later than three months after the me earned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a reply within the statutory minimum of thirt iod will apply and will expire SIX (6) MON atute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication (35 U.S.C. § 133).	nication.	
2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quay/e, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-32 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filled on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filled on is: a) approved by disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some *c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in Application No. 4. See the attached detailed Office action for a list of the certified copies of the certified copies of the priority documents have been received in Application for a provisional application for a list of the certified copies of the		7 August 2002			
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)☑ Claim(s) <i>J</i> -32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5)☐ Claim(s) is/are allowed. 6)☑ Claim(s) <u>J</u> -32 is/are rejected. 7)☐ Claim(s) is/are objected to. 8)☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9)☐ The specification is objected to by the Examiner. 10)☑ The drawing(s) filed on 30 <i>March</i> 2001 is/are: a)☑ accepted or b)☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12)☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)☐ All b)☐ Some * c)☐ None of: 1.☐ Certified copies of the priority documents have been received. 2.☐ Certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a)☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) Wotice of Informal Patent Application (PTO-152)					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims	/ _		tors, proposition as to the me	orito io	
4) Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on 30 March 2001 is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121. **Matchment(s)** 10 □ Notice of References Cited (PTO-892) □ Notice of Informal Patent Application (PTO-152)				E1112 12	
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. **Matchment(s)** 10 Notice of References Cited (PTO-892) 4) □ Interview Summary (PTO-413) Paper No(s) 5) □ Notice of Informal Patent Application (PTO-152)	Disposition of Claims				
5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.	4) \square Claim(s) <u>1-32</u> is/are pending in the applicat	tion.			
6) ☐ Claim(s) 1-32 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 30 March 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.	4a) Of the above claim(s) is/are withd	drawn from consideration.			
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s) Notice of Informal Patent Application (PTO-152)	5) Claim(s) is/are allowed.				
8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 22 Notice of Praftsperson's Patent Drawing Review (PTO-948)	6)⊠ Claim(s) <u>1-32</u> is/are rejected.				
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.	7) Claim(s) is/are objected to.				
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 30 March 2001 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.	, , , , , , , , , , , , , , , , , , , ,	d/or election requirement.			
10) ☐ The drawing(s) filed on 30 March 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10 ☐ Notice of References Cited (PTO-892) 41 ☐ Interview Summary (PTO-413) Paper No(s) 52 ☐ Notice of Informal Patent Application (PTO-152)	Application Papers				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10 Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)	9) The specification is objected to by the Exami	iner.			
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 4) Interview Summary (PTO-413) Paper No(s) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	10)⊠ The drawing(s) filed on <u>30 March 2001</u> is/are	e: a)⊠ accepted or b)⊡ objecto	ed to by the Examiner.		
If approved, corrected drawings are required in reply to this Office action. 12) ☐ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10 ☑ Notice of References Cited (PTO-892) 41 ☐ Interview Summary (PTO-413) Paper No(s) 22 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)					
Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10 ☑ Notice of References Cited (PTO-892) 21 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 51 ☐ Notice of Informal Patent Application (PTO-152)			isapproved by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1 ☐ Interview Summary (PTO-413) Paper No(s) 5 ☐ Notice of Informal Patent Application (PTO-152)		• •			
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1.		Examiner.			
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) Attachment(s) Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 1 Notice of Informal Patent Application (PTO-152)	Priority under 35 U.S.C. §§ 119 and 120				
1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 10 ☑ Notice of References Cited (PTO-892) 41 ☐ Interview Summary (PTO-413) Paper No(s) 51 ☐ Notice of Informal Patent Application (PTO-152)	13) Acknowledgment is made of a claim for fore	eign priority under 35 U.S.C. §	§ 119(a)-(d) or (f).		
2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 4) Interview Summary (PTO-413) Paper No(s) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	a) ☐ All b) ☐ Some * c) ☐ None of:				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 5) Notice of Informal Patent Application (PTO-152)	 Certified copies of the priority docume 	ents have been received.			
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 5) Notice of Informal Patent Application (PTO-152)	2. Certified copies of the priority docume	ents have been received in A	oplication No		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 5) Notice of Informal Patent Application (PTO-152)	application from the International	Bureau (PCT Rule 17.2(a)).	_	je	
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)		•		dication)	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s) 5) Notice of Informal Patent Application (PTO-152)	a) The translation of the foreign language	provisional application has be	een received.	moation <i>j</i> .	
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s) Discreption of Draftsperson's Patent Drawing Review (PTO-948) 4) Notice of Informal Patent Application (PTO-152)		estic priority under 35 U.S.C.	§§ 120 and/or 121.		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)	_ ``				
	2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of I			

Application/Control Number: 09/822,643

Art Unit: 2188

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 7, 2003 has been entered.
- 2. Claims 1, 14, and 27 have been amended by Applicant. Claims 1-32 are pending.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "a chipset cache located in a chipset internally to the processor", which is contradictory because "chipset" implies not internal to a processor, and further contradicts the language "the chipset being a memory controller external and coupled to the processor". If "internally to the processor" refers to the "chipset cache controller" then the claim should be amended to clarify this. Claim 14 recites "chipset internally to the processor", and claim 27 recites "control the chipset cache internally to the processor". In each case the claim may be construed as

Application/Control Number: 09/822,643

Art Unit: 2188

meaning the chipset is internal to the processor, which is contradictory. All other claims depend from these and are rejected for the same reasons.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-2, 14-15, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al., U.S. Patent 6,237,064 B1, in view of Cho, U.S. Patent 6,629,218 B2.
- 7. As to claims 1-2, 14-15, and 27-28, Kumar discloses the recited apparatus, method, and system including processor with cache unit (L1) and internal controller for external chipset cache (L2) with tag store and coherency controller, see Abstract, Figure 1, column 3 lines 9-30 and column 3 line 63 to column 4 line 13, and column 4 line 66 to column 5 line 6. Kumar does not disclose that the L2 cache is part of a memory controller. However, it was known that such an L2 cache could be placed either separately (on a back side bus as depicted in Kumar), or on the same bus with the memory controller (see Cho, Fig. 1). Cho further notes that for specific preferences any configuration or combination of integrated circuits may be implemented (see col. 5 lines 38-46), and therefore it is clear that the L2 cache 14 may be integrated with the memory controller 16 if desired. This would achieve any number of recognized advantages such

Art Unit: 2188

as reduced cost by using available parts, or by reducing the number of separate parts needed. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to include the L2 cache in a memory controller, because it was known that an L2 cache could advantageously be implemented adjacent to a memory controller in such a system, and integration of such parts was well known and was taught by Cho.

- 8. Claims 3-13, 16-26, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al., U.S. Patent 6,237,064 B1, in view of Cho, U.S. Patent 6,629,218 B2, and further in view of Gilda, U.S. Patent 6,438,657 B1.
- 9. As to claims 3, 16, and 29, neither Kumar nor Cho disclose the coherency protocol is MESI. However, this was a well known and common coherency protocol known at the time, and was known to be specifically beneficial to a system having on-chip L1 and on-chip controller for L2, as taught by Gilda (see Figure 1, and column 11 line 52 to column 12 line 24); therefore an artisan would have been motivated to use MESI in Kumar. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use a MESI protocol, because it was a well known coherency protocol and was previously taught in analogous devices.
- 10. As to claims 4-13, 17-26, and 30-32, the recited signals, indicators, and resulting operations are disclosed or inherent to the operation of Kumar, or as taught in Gilda are indigenous to the coherency operations involving multi-level caches, and as such would have been obvious to provide in Kumar as a function of providing the MESI protocol as described above.

Art Unit: 2188

Response to Arguments

11. Applicant's arguments filed August 7, 2003 have been fully considered but they are most in view of the new grounds of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No:

6,487,639 B1 Separate L2 cache with controller on processor (col. 5).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary J Portka whose telephone number is (703) 305-4033. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (703) 306-2903. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

Gary J Portka Primary Examiner Art Unit 2188

Say Worth

November 3, 2003